EFFECTIVE DATE: 11-18-02

Chester LabNet

Standard Operating Procedure AD-008.03

SAMPLE RECEIPT AND LOG IN CHESTER LABNET PROPRIETARY METHOD

Approvals:

Sun Hild Ands	11-14-02	
TECHNICAL REVIEWER	DATE	DATE
Technical Reviewer	DATE	DATE
Technical		

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REVIEW HISTORY

Review date:	Changes made:	Changes made by:
11/13/02	Updated formatting. Updated figures. Added sections 7.8 and 7.9 to reflect current practice.	Sheri Heldstab
11/12/01	Updated formatting. Major revision to eliminate conflicts and duplication of information between this SOP and SOP AD-007 (LIMS)	Sheri Heldstab
8/10/00	Updated format and figures. Small changes to Section 7.9.2.	C.R. Lytle
5/24/99	Added Section 7.5.	C.R. Lytle
12/12/95	No changes. Date of origination.	C. R. Lytle

ANNUAL REVIEW

Signature	printed name/title	date
to current practices and the latest QA/	QC protocols:	
The undersigned attests that this stand	ard operating procedure has undergone	annual review for adherence

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SAMPLE RECEIPT AND LOG IN CHESTER LABNET PROPRIETARY METHOD

1.0 Scope and Application

1.1 This method applies to the receipt and log in of all samples shipped to Chester LabNet.

2.0 Summary

2.1 Samples are received and inspected for sample container and sample integrity. Chain of Custody forms are checked against shipment contents and signed with the date and time noted on the form. Anomalies are communicated to the client and corrective actions carried out. An analysis request form is filled out and unique laboratory identification numbers are assigned to each sample by the laboratory information management system (LIMS). A worklist for the analysts is prepared and a project file is created which contains all pertinent documents relating to the sample batch. Samples are transferred to the appropriate analyst for preparation or appropriate storage location until analysis can begin.

3.0 Sampling and Storage

3.1 N/A

4.0 Apparatus

- 4.1 Laboratory Information Management System (LIMS)
- 4.2 Analysis request forms
- 4.3 Sample log in forms
- 4.4 Job file folders (manila folders)
- 4.5 Thermometer

5.0 Reagents

5.1 N/A

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6.0 Calibration/Preparation

6.1 N/A

7.0 Procedure

- 7.1 Examine the Verified Time of Sample Receipt (VTSR) and sampling date.
- 7.2 Examine the shipping container for the presence of custody seals. If custody seals are present, examine the integrity of each seal. Retain the bill of lading (air bill) if attached to the exterior of the shipping container.
- 7.3 Open the shipping container and note the presence/absence of the following items:
 - 7.3.1 Bottle for monitoring transit temperature
 - 7.3.2 Chain of custody (CoC) form
 - 7.3.3 Client sample analysis request (often part of the CoC form)
- 7.4 If present, immediately take the temperature of the fluid in the transit temperature bottle. Do not remove the bottle from the shipping container. Note the temperature on the CoC form provided with the samples.
- 7.5 If a temperature bottle is supposed to be present, but is not in the shipping container, place the thermometer into the cooler so that the bulb is at the same level as the samples. Close the cooler lid as far as practical, wait two minutes, then quickly remove the thermometer and read the temperature.
- 7.6 Note the presence/absence of custody seals and seal condition on the CoC provided with the samples.
- 7.7 Remove the sample containers and examine for breakage or leakage. Note any problems on the CoC form. Compare the sample ID number and tag number (if present) with those listed on the CoC form. Note any discrepancies on the CoC form. In case of discrepancies, notify the client contact and proceed with any agreed upon corrective actions.

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7.8 For stack testing methods only, complete the Source Sample Receipt Checklist (see figure 4)

- 7.9 For projects requiring a written record that the pertinent steps in the sample receipt process have been followed, a preprinted checklist will be filled out during the sample receipt (see figure 3).
 - 7.9.1 Each step in the procedure will be checked off on the list immediately after that particular step has been accomplished.
 - 7.9.2 Included on the checklist will be the client and project names, date and time of sample receipt, chain of custody form ID number, number and type of samples, and the name and signature of the person receiving the samples.
 - 7.9.3 The signed original checklist is placed in the job file folder and included in the data package sent to the client.
- 7.10 Sign and date the CoC form. If the samples are from an existing client, proceed to section 7.12
- 7.11 Initiate the job in the accounting software:
 - 7.11.1 If the samples are from a new client, assign a new client/job identification number in the format X000, where X is the first letter of the client's business name (e.g., C for Chester LabNet), and 000 are ascending numbers to differentiate clients with the same letter (e.g., if Chester LabNet were C001, Crucial Analytical Services would be C002 or some other number).
 - 7.11.2 For all samples, enter the client name, invoicing address, ship to address, contact name and appropriate phone numbers into the accounting software.
- 7.12 Fill out an Analysis Request form, including the following (see figure 1):
 - 7.12.1 Client name and client/job ID number
 - 7.12.2 Date samples received
 - 7.12.3 Date results are due to the client
 - 7.12.4 Number of samples

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- 7.12.5 Analytes and costs
- 7.12.6 Purchase order or Project Number
- 7.13 Log samples into the LIMS as described in Standard Operating Procedure AD-007, Laboratory Informational Management System (LIMS)
- 7.14 Write the LIMS generated laboratory ID numbers on the analysis request form. Place the completed form in the analysis request book.
- 7.15 Using the LIMS, print out sample labels and affix to their corresponding samples. For all samples except filters supplied by Chester LabNet, each label will contain the following information:
 - 7.15.1 Client sample number
 - 7.15.2 LIMS generated laboratory sample ID
 - 7.15.3 Client/job ID number
 - 7.15.4 Report number
- 7.16 Using the LIMS, print out an Analyst Worklist, and place the worklist in the appropriate worklist folder in the lab. (See figure 2). Note that for XRF analysis run sheets are used in lieu of worklists. The XRF run sheets contain 15 sample IDs or less (usually 10) and the corresponding deposit mass and area.
- 7.17 Transfer the samples to the appropriate area (e.g., weighroom for equilibration, refrigerator/freezer or sample staging area in the lab)
- 7.18 Prepare a job file folder, labeling the folder with the client name and ID number and the report number. Place the completed chain of custody form and all other pertinent documents (e.g., air bills, telephone contact sheets etc) in the folder. Place the folder in the work-in-progress queue.

8.0 QA/QC

- 8.1 Sample Receipt Checklist.
 - 8.1.1 Frequency: once per sample receipt batch requiring a checklist

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8.1.2 QC statistic: completed worklist

8.1.3 Corrective action: contact client for any discrepancies or errors. Note corrective actions at the bottom of the checklist.

9.0 Calculations

9.1 N/A

10.0 References

10.1 U.S. EPA. 1978 (revised 1983). National Enforcement Investigation Center (NEIC) Policies and Procedures. U.S. Environmental Protection Agency, Office of Legal and Enforcement Counsel, Denver, CO.

10.2 U.S. EPA. 1979. Handbook for Analytical Quality Control in Water and Wastewater Laboratories. EPA-600/4-79-019. U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, OH.

11.0 Analyst Notes

11.1 N/A

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Laboratory Analysis Request Form

Client:				Project Number:			
Nun	nber of samples:		Report Number:				
Date Received:				- -	Date	Due:	
Sam	ple Type:			_			
Lab	Net ID's:						
	Gravimetry	,				Specialty Tests	S
#	Test	Price			#	Test	Price
	Gross Weight		Ī			Resuspension	
	XRF		-			HF Digestion	
#	Protocol	Price				Extraction	
			Ī			•	
	Carbon Analy	sis					
#	Test	Price	Worklist #				
	OC/EC			Ī			
			Convention		lysis		
#	Test	Price	Worklist #			Analytes	
	GFAA						
-	ICP						
	IC Anions						
	IC Cations						
-	CVAA			Hg			
	UV-VIS			Cr VI			
<u> </u>							
	Notes:						
	_						
	Total Price	per Sample	: \$	_		Invoice Date:	
		e Order No				Invoice #	.

Figure 1. Example Analysis Request Form

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ICP		Workl	ist Number	9749	Date F	Requested:	11/ 6/02	
Clien	nt: A00)5	(Client Na	ame)				
Repor	t #: (02-270)					
	Lab I	ID		Analyt	e Result	s in ug/L		
1.	kv:ICV	J					Expected	% Recovery
				Pk				
2.	bl:IC	3						
				Pk				
3.	bl:Pre	ep_Blk						
				Pk				
4.	bl:Met	ch_Blk						
_		_		Pk				
5.	Spike	of						Spike Rec.
				Pk	·			
6	00 5	11000	00110557/D	0.1 DI				
			0211055A/B-	-01 Pk	·		Difference	
7.	Dup ()L		Pk				
				PI	·			
Ω	በ 2 _ ሞ 2	11032	0211055A/B-	-03 Pk				
	Spike			05 FL			Snk Amount	Spike Rec.
٠.	ppine	O1		Pk				
10.	02-T1	11935	0211010-072	A Pk				
11.	02-T	11936	0211055A/B-	-05 Pk				
12.	02-T	11942	0211010-052	A Pk				
13.	02-T	11943	0210726-05	A Pk				
14.	kv:CC	J					Expected	% Recovery
				Pk				
15.	bl:CCH	3						
				Pk	·			

Figure 2. Example Analyst Worklist

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CHESTER LABNET SAMPLE RECEIPT CHECKLIST

Client	Rocky Mountain Arsenal	Date	
SDG		Time	
# Samples		Matrix	
Chain of Cu	ustody Form Number(s)		
Custody Se	eals Inspected, If Present		
Transit Ten	nperature Bottle Inspected, If Prese Temperature Taken	nt	
Chain-of-Cu	ustody Form Inspected Has Form Been Signed? Have Date and Time Custody Rel Condition of Custody Seals Noted Transit Temperature Noted		
All Sample	Containers Inspected Does Number of Samples Match Do All Sample ID Numbers Match Are the Sample Containers Intact	Those on the COC Form?	
Chain-of-Cu	ustody Form Signed and Dated		
Corrective A	Actions Client Contacted Due to Mismatch Client Contacted Due to Broken S Client Contacted Due to Leaking S Corrective Actions Documented o Corrective Actions Accomplished Phone Contact Sheet Placed in Jo	sample Container(s) Sample Container(s) n Phone Contact Sheet	
Signed			
Notes			

Figure 3. Example Sample Receipt Checklist

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CHESTER LABNET SOURCE SAMPLE RECEIPT CHECKLIST

Client Date	
# Runs Time	
Custody Seals Inspected, If Present	
Chain-of-Custody Form Inspected CoC present with samples? CoC indicate analytical methodology to be used? (eg M29 etc) CoC indicate if compliance testing? (esp. M26) M26 samples have Thiosulfate added in field? M29 indicate FH/BH separate or combined? Has Form Been Signed? Have Date and Time Custody Released Been Noted on Form?	
All Sample Containers Inspected Does Number of Samples Match Number on CoC Form? Do All Sample ID Numbers Match Those on the CoC Form? Did client mark sample volumes prior to shipment? If required by method, did client vent samples prior to shipment? Are the Sample Containers Intact? Are signs of leakage present? !!	
Chain-of-Custody Form Signed and Dated by CLN	
Corrective Actions Client Contacted Due to Mismatching Sample ID Numbers Client Contacted Due to Broken Sample Container(s) Client Contacted Due to Leaking Sample Container(s) Client contacted for verification of methodology? Corrective Actions Documented? Corrective Actions Accomplished?	
Items marked !! shall be addressed prior to any analytical work being started. Items marked * shall be noted in case narrative upon reporting of results to client.	
Signed	
Notes	

Figure 4. Example Source Sample Receipt Checklist